

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Jon C. Soper, et al.	Docket No.:	GIV.P30054
Serial No:	10/555,727	Examiner:	Jyoti CHAWLA
Filed:	November 7, 2005	Group Art Unit:	1794
Title:	Alginate Matrix Particles		

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August 20, 2010

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APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. §41.41

To the Honorable Commissioner For Patents:

This is a Reply Brief submitted in response to the Examiner's Answer mailed June 21, 2010, which was in response to Appellants' Brief under 37 C.F.R. §41.37 appealing to the Board of Patent Appeals and Interferences (the "Board") from the final rejection set forth in the Office Action mailed November 12, 2009. The Notice of Appeal was filed on January 20, 2010. The appeal is of pending claims 1-20.

The **Status of Claims** begins on Page 2.

The **Grounds of Rejection to Be Reviewed on Appeal** begins on Page 3.

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Status of Claims

The present patent application was filed on November 7, 2005 with original claims 1-11.

In a preliminary amendment filed on November 7, 2005, Appellants added claims 12-20.

Claims 1-20 are currently under final rejection and constitute the claims on appeal.

Grounds of Rejection to be Reviewed on Appeal

The grounds for rejection to be reviewed in the present appeal are:

A. Anticipation

1. Rejection under 35 U.S.C. § 102(b) of Claims 1-5, 8, 10-12, 15-16 and 20

The rejection of claims 1-5, 8, 10-12, 15-16 and 20 under 35 U.S.C. § 102(b) as being anticipated by US 5,266,335 to Cherukuri et al.

B. Obviousness

1. Rejection Under 35 U.S.C. § 103(a) of Claims 7, 13-14 and 17-19

The rejection of claims 7, 13-14 and 17-19 under 35 U.S.C. § 103(a) as being unpatentable over US 5, 266,335 to Cherukuri et al.

2. Rejection Under 35 U.S.C. § 103(a) of Claim 6

The rejection of claim 6 under 35 U.S.C. § 103(a) as being unpatentable over US 5,266,335 to Cherukuri et al. in view of US 5,912,030 to Huzinec et al.

3. Rejection Under 35 U.S.C. § 103(a) of Claim 9

The rejection of claim 9 under 35 U.S.C. § 103(a) as being unpatentable over US 5,266,335 to Cherukuri et al. in view of US 4,515,769 to Merritt et al.

Argument

For clarity, sections numbers below correspond to the section numbers appearing in the Examiner's Answer.

A. Claim Objections

The withdrawal of the objection to Claim 9 for spelling of "colouring matter" not being acceptable US spelling is gratefully acknowledged.

B. Rejection Under 35 U.S.C. § 102(b) of Claims 1-5, 8, 10-12, 15-16 and 20

The Answer maintains the rejection of Claims 1-5, 8, 10-12, 15-16 and 20 under 35 U.S.C. 102(b) as allegedly anticipated by US Patent No. 5,266,335 to Cherukuri et al. for the reasons set forth on pages 4-8 of the Examiner's Answer. Appellants respectfully traverse this rejection.

According to the Federal Circuit, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir.1987), *cert. denied* 484 U.S. 827 (1987). The absence of an element of a claim from a prior art reference negates anticipation of that claim by that reference. *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565, 230 USPQ 81, *on rehearing*, 231 USPQ 160 (Fed. Cir. 1986), *cert. denied* 479 U.S. 1034 (1987).

Cherukuri et al. must describe each and every element of claims 1-5, 8, 10-12, 15-16 and 20 in order to anticipate these claims under 35 U.S.C. §102(b). Appellants respectfully submit that Cherukuri et al. fails to satisfy this requirement, as set forth below. The structure of the matrix particles as claimed is different than the microcapsules of Cherukuri et al. The matrix particles as claimed are structurally different as they contain a plurality of inclusions of oil (i.e., similar to the plurality of seed casings contained within the shell of a pomegranate) in contrast to the microcapsule

structure of Cherukuri et al. that contains an individual oil core surrounded by a coating layer.

Further, there is no teaching or suggestion in Cherukuri et al. that these microcapsules have reduced surface oil or exhibit a high loading efficiency (page 3, lines 6-7 of the specification), or they comprise a free flowing powder (page 2, line 19 of the specification). One of ordinary skill in the art would not look to Cherukuri et al. for methods to reduce surface oil in matrix particles.

Point i.

The Answer maintains that Cherukuri et al.'s microcapsules are matrix particles because they allegedly comprise an emulsion which comprises dispersed oil and resin. However, Cherukuri et al.'s microcapsules do not constitute matrix particles as claimed in claim 1, as Cherukuri et al. teaches that the emulsion is the core material and the entire emulsion is surrounded by a coating layer. This is contrary to Appellants' definition of "a matrix particle" as "a particle comprising as a continuous phase and as a matrix material a polymer and in a discontinuous phase an oil dispersed within the matrix, e.g., a multitude of oil droplets." See the Specification, page 3, lines 14-18. In Cherukuri et al., the oil particles are not a discontinuous phase *dispersed within* a continuous phase matrix, they are all contained in the center of the coating layer as a continuous phase, comprising a single core. Thus, Cherukuri et al. fails to disclose matrix particles comprising a discontinuous phase of a plurality of inclusions of oil, where the oil is dispersed within a matrix, as recited in claim 1. Accordingly, Cherukuri et al. does not anticipate the subject matter of claim 1 and the claims depending therefrom.

The Answer maintains that Cherukuri et al. (col. 7, lines 45-50) teaches that encapsulated flavors may be formulated in effective amounts with conventional additives, i.e., pharmaceutical carriers can also be added as fillers to the encapsulated flavor matrix. This is a misstatement of Cherukuri et al. What Cherukuri et al. actually states is that once prepared, the *encapsulated* flavoring agent may be stored for future use, or may be

formulated in effective amounts *with* conventional additives, such as pharmaceutically acceptable carriers or confectionery ingredients. Stated otherwise, Cherukuri et al. teaches that the microcapsules may be added as flavoring agents to pharmaceuticals. This does not anticipate the present claims.

The Answer (pages 15-17) recites that Cherukuri teaches a composition comprising an emulsion, and defines an emulsion as a mixture of two or more immiscible or unblendable liquids, where one liquid is dispersed in the other, where one liquid is a continuous phase and another in discontinuous. The Answer states that “since Cherukuri et al. teaches of adding oil first to resin to make an emulsion and then the oil-resin emulsion is added to aqueous solution of hydrophilic colloidal material, such as gelatin, which makes an emulsion by coating or surrounding the oil-resin emulsion (see col. 5, lines 40-45, 58-61 and col. 6, lines 35-65) it is inherent that the final emulsion as taught by Cherukuri et al. comprises a plurality of inclusions of flavor oil where the oil is in a discontinuous phase”. Appellants respectfully traverse.

It is well established that inherency must be established beyond possibility or probability. See, e.g., *In re Oelrich*, 666 F.2d 578, 581-82 (C.C.P.A. 1981) (“Inherency, however, may not be established by probabilities or possibilities.”) The fact that a certain result or characteristic *may* occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re. Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir.1993). “In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. Appl. & Inter. 1990); MPEP §2112. An invitation to investigate is not an inherent disclosure, where a prior art reference discloses “no more than a broad genus of potential applications of its discoveries”. *Metabolite Labs, Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1367, 71 USPQ2d 1081, 1091 (Fed. Cir. 2004). The Federal Circuit explained that a “prior art reference that discloses a genus still does not inherently

disclose all species within that broad category” but must be examined to see if a disclosure of the claimed species has been made or whether the prior art reference merely invites further experimentation to find the species.

While *some* emulsions may comprise a discontinuous phase of a plurality of inclusions, not *all* emulsions will inherently result in a matrix particle comprising a discontinuous phase of a plurality of inclusions of oil, as required by claim 1. It has not been demonstrated that Cherukuri et al.’s microcapsule is equivalent to a matrix particle as recited in claim 1, or that it includes a plurality of inclusions, let alone that a plurality of inclusions is an inherent feature of the emulsion process. Cherukuri et al. provides no guidance or motivation for achieving a matrix particle comprising a discontinuous phase of a plurality of inclusions of oil, nor does Cherukuri et al. specify the fine adjustments or parameter optimizations required in the process of preparing the matrix particles. Because Cherukuri et al. does not correlate all emulsions with a discontinuous phase of a plurality of inclusions of oil, Cherukuri et al. cannot be used to infer the ability of all emulsion processes to provide a plurality of inclusions. Nowhere does Cherukuri et al. disclose or suggest that the microcapsules include a plurality of inclusions of oil, where the oil is in a discontinuous phase. Cherukuri’s emulsion process does not necessarily or inherently result in the characteristic plurality of inclusions of oil, where the oil is in a discontinuous phase, of the present claims. Not every emulsion contains a plurality of inclusions rather than a single core. Because the Office cannot show that the final emulsion of Cherukuri et al. comprises a plurality of inclusions of oil where the oil is in a discontinuous phase, the Office cannot rely on the principle of inherency with respect to Cherukuri et al.

Point ii

The Answer relies on Fig. 1 which allegedly shows that “some of the microcapsules appear to have more than one inclusion, i.e., plurality of inclusions (see specifically left end of the figure)”. No conclusions can fairly be drawn from Fig. 1 as it

is difficult to see exactly what the figure shows. However, as the description of Fig. 1 in Cherukuri et al., col. 3, lines 10-16 makes clear, Cherukuri et al. contemplates a single core, and not a plurality of cores inside the coating layer of the microcapsule. The figure description (col. 3, lines 11-16) reads:

FIG. 1 is a picture of microencapsulated flavoring agents in the form of spheroidal microcapsules which comprise *a* core of peppermint oil and the glycerol ester of partially hydrogenated wood rosin and a coating layer over *the* core comprising a mixture of gelatin and gum Arabic. (Emphasis added).

The specification and Abstract of Cherukuri et al. provide further support that the microcapsule contains only an individual core and not a plurality of cores. The specification at col. 1, lines 14-16 states, "this invention pertains to microcapsules containing *a* core comprising an emulsion of a flavoring agent and a resin and a coating layer over *the* core". Furthermore, the abstract (lines 1-4) states, "The present invention pertains to a microencapsulated flavoring agent in the form of a spheroidal microcapsule which comprises *a* core and a coating layer over the core." (Emphasis added). Due to differences in the process for preparing the claimed matrix particles and the process for preparing standard particles, the same process cannot be used to make a mixture of matrix and standard particles. Thus, Fig. 1 must illustrate either standard spherical microcapsules or the subject matrix particles, but not both. On the basis of the Cherukuri et al. disclosure, it is clear that Fig. 1 illustrates standard spherical microcapsules containing a single core and not matrix particles containing a plurality of inclusions of oil.

The Answer argues that "the features argued by the appellant "plurality of inclusions within a microcapsule" have not been recited in the rejected claims, and the claims recite a plurality of inclusions within a matrix, which may or may not comprise a microcapsule, and can be a matrix for a confection, such as chewing gum. Appellants respectfully traverse this rejection. Claim 1 is directed to *matrix particles* and not just a

matrix. Particles are very small bodies. In this case, the matrix particles range in size from 5-2000µm in diameter (see specification, page 7, line 15). Clearly, chewing gum does not qualify as a matrix particle. There are distinct chemical and structural differences between the matrix particles of the present claims and the chewing gum of Cherukuri et al. Thus, the argument on page 16 of the Answer that “Cherukuri’s chewing gum (col. 8, line 39 to col. 17, line 17) can be the matrix comprising cross-linked polymer, resin and flavor oil and gum arabic or other fillers” is invalid. While chewing gum may be a matrix, it is not a matrix particle as claimed in claim 1.

Point iii Cherukuri et al. fail to teach fillers

The Answer contends that the gum arabic in Churukuri et al. acts as a filler, that the resin can also be a filler, that appellant has not defined the term “filler” but merely provided examples of filler (specification, page 3, line 21 to page 45, line 25) and that a gum, cellulose polymer or microcrystalline cellulose constitutes filler (specification, page 3, and lines 28-29). Appellants respectfully traverse these allegations.

The specification (page 3, lines 24-25; page 4, lines 26-29) defines fillers as inert, insoluble, non-swellaable substances, which form a dispersion of solid particles in water. The filler must be an insoluble compound that is capable of forming a network in the matrix particle. This network provides structural rigidity to the matrix, similar to reinforcing rods in concrete, thus reducing the surface oil. If the filler compound is water soluble, it is more or less uniformly dispersed in the particle during drying, and does not form the required network in the matrix particle. Consequently, soluble fillers would not solve the problem addressed by the claimed subject matter, namely, how to reduce the surface oil associated with matrix particles containing oil.

Gum arabic is not a filler as defined by Appellants and as required in claim 1. Gum arabic, being extremely soluble in water, does not function as a filler in Cherukuri as it does not possess the property of insolubility in water.

Nor does resin function as a filler, as defined and claimed by Appellants. First, Cherukuri et al. adds resin to the oil and not to the polymer matrix, as claimed in claim 1. A resin added to an oil core of a microcapsule is not structurally or functionally equivalent to a matrix particle comprising a crosslinked polymer and at least one filler that holds a discontinuous phase of a plurality of inclusions of oil, where the filler is added to strengthen the wall of the particle to prevent seepage of oil which accumulates on the surface of the particle. Second, the resins are soluble in water whereas the claimed fillers are insoluble in water. Third, the resin cannot be a filler as the emulsion contains resin and the very flavoring oil that appellants seek to prevent seeping out.

Point iv

The Answer maintains that the method of claim 11 is disclosed in Cherukuri et al. The Answer further contends that claim 11 is a product by process claim and the patentability of a product does not depend on its method of production. Appellants respectfully traverse this rejection. While crosslinking and drying standard microcapsules may be disclosed in Cherukuri et al., forming matrix particles as claimed is not disclosed or suggested. As the microcapsules of Cherukuri et al. are not matrix particles, Cherukuri et al. does not disclose a process of forming such matrix particles, as discussed above. Cherukuri et al.'s process for forming standard microcapsules differs from the processes disclosed in the present application which are multiple emulsion techniques. As Cherukuri et al. fail to disclose or suggest a process for preparing matrix particles, claim 11 is not anticipated by Cherukuri et al.

Point v

With respect to claim 20, the Answer maintains that matrix particles comprising a stabilizer are disclosed because emulsifiers listed in Cherukuri et al. also act as a stabilizer. Appellants respectfully traverse this rejection. As detailed above, the microcapsules of Cherukuri et al. are not matrix particles. As Cherukuri et al. fail to

disclose or suggest a process for preparing matrix particles, claim 20 is not anticipated by Cherukuri et al.

Cherukuri et al. does not teach or suggest each and every element of claims 1-5, 8, 10-12, 15-16 and 20. A claim is anticipated when each and every element of the claim is found in a single prior art reference. Appellants submit that the record supports a finding by the Board that the Office Action allegations fail to support the rejection of claims 1-5, 8, 10-12, 15-16 and 20 as anticipated under 35 U.S.C. §102(b). Cherukuri et al. fails to disclose every element of pending, amended claims 1-5, 8, 10-12, 15-16 and 20. Accordingly, Appellants respectfully requests that the 35 U.S.C. §102(b) rejection of claims 1-5, 8, 10-12, 15-16 and 20 over Cherukuri et al. be reversed. Moreover, because each claim that depends from independent claim 1 incorporates all of the features of claim 1 by definition, none of the dependent claims are properly anticipated by Cherukuri et al.

C. Rejection Under 35 U.S.C. § 103(a) of Claims 7, 13-14 and 17-19

Point i

It is respectfully submitted that one rejection to which Appellants are responding is the rejection over Cherukuri et al. alone. There is no combination “to attack”. Rather, the Cherukuri et al. reference must be distinguished on its own merits. The Office Action indicates agreement that Cherukuri et al. does not teach the matrix particles. Cherukuri et al. alone cannot render the claims of the present application obvious.

Appellants further submit that the combinations of Cherukuri et al. and Huzinec et al., and Cherukuri et al. and Merritt et al., are improper for the reasons set forth in previous Responses, and for further reasons that will be addressed below. The combination of any or all of these secondary references with Cherukuri et al. fail to suggest the matrix particles as claimed.

With respect to claims 13 and 14, the Answer alleges that Cherukuri et al. teaches addition of pharmaceutical or food carriers or bulking agents as fillers to the encapsulated flavor matrix and that one would have been motivated to do so to provide bulk or texture to the matrix as taught by Cherukuri et al. (col. 11, lines 66-68), as bulking agents such as mineral adjuvants may serve as fillers and textural agents. Appellants respectfully disagree.

What Charukuri et al. actually teaches (col. 8, lines 44-47) is that “the improved chewing gum composition will contain a gum base, an effective amount of the inventive microencapsulated flavoring agent, and various additives.” Further, Charukuri et al. (col. 11, lines 66-68) teaches that “the gum base of the invention may also include effective amounts of bulking agents such as mineral adjuvants which may serve as fillers and textural agents”. Thus, Cherukuri et al. teaches adding bulking agents to the gum base or to the gum composition, but not to the encapsulated flavor matrix as the Answer states. The amount of the encapsulated flavoring agent employed in an edible composition is dependant upon the type of bulking agent or carrier employed in the edible composition, rather than in the encapsulated flavoring agent (Cherukuri et al., col. 7, lines 58-62). While the edible composition may be chewing gum, chewing gum is not a matrix particle as discussed above. Accordingly, Cherukuri et al. does not disclose or suggest matrix particles as claimed by Appellants or that a bulking agent/filler may be added to the wall of such particles as claimed by Appellants.

In any case, Cherukuri et al. (col. 13, lines 39-42) teaches that the bulking agents (carriers, extenders) may be water-soluble. Being water soluble, Cherukuri's bulking agents do not qualify as fillers as defined by Appellants. Appellants require that the filler be insoluble (specification, page 3, lines 24-25; page 4, lines 26-29) in order to strengthen the walls of the particles and prevent surface oil accumulation. Soluble fillers would not reduce the surface oil associated with matrix particles containing oil and thus, would not solve the problem addressed by the claimed subject matter.

Point ii

With respect to claims 7 and 17-19, the Answer contends that Cherukuri et al. (Col. 6, line 65-col. 7, line 5) addresses the problem of surface oil and teaches how to produce microcapsules with a pore size so small that the encapsulated oil will not escape through the capsule walls.

Based on this disclosure, Cherukuri et al.'s method solves the problem of surface oil, i.e., oil escaping through the capsule walls to the surface of the capsule, and there is no need for a person skilled in the art to consider further solutions to the problem of surface oil. Therefore, there is no motivation for a person of ordinary skill in the art to add insoluble filler to the matrix as claimed.

Appellants' disclosure teaches how to prevent matrix particles from squeezing out oil when they are crosslinked and the matrix material contracts. Appellants' solution to prevent oil from seeping out from the inside of the matrix particles is to add insoluble fiber. The insoluble fiber forms a network in the matrix particle and acts like steel rods in the matrix to provide structural integrity to the matrix particle to reduce seepage of surface oil. Appellants' solution of adding insoluble filler to the matrix would be superfluous and redundant based on Cherukuri et al. which allegedly solves the problem of escaping oil by controlling the pore size of the microcapsules.

Furthermore, the Final Office Action on page 5, point iii, alleges that "Cherukuri et al. teaches of making the microcapsules as recited in claim 1 and in a manner such that no oil escapes and the surface oil is removed with the help of water and anticaking agent, i.e., no surface oil." If there is no or very little surface oil, there is no need to add a filler to the microcapsules of Cherukuri et al. to reduce surface oil. Accordingly, no *prima facie* case of obviousness has been presented for claims 1 and 9.

Point iii

The Office's arguments have been addressed in Appellants' response in Section B above.

Section D Rejection under 35 U.S.C. §103(a) of Claim 6

Point i

Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Cherukuri et al. in view of Huzinec et al. The Office argues that Cherukuri et al. suggests flavor oil comprising matrix further comprising other additives, fillers or carriers, and Huzinec et al. provides a specific filler or carrier, microcrystalline cellulose. The Office argues that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cherukuri et al. in view of Huzinec et al. and add microcrystalline cellulose to the matrix comprising flavor oil, as a carrier or filler, for the purpose of producing a flavor matrix comprising one or more active ingredients or oil/flavor oils wherein the matrix particles remain stable and have a delayed release property. Appellants respectfully traverse this rejection.

Cherukuri et al. does not disclose or suggest matrix particles, or that matrix particles comprise a discontinuous phase of a plurality of inclusions of oil, and the matrix particles comprise a crosslinked polymer and at least one filler. Huzinec et al. does not cure the deficiencies of Cherukuri et al. Huzinec et al. teaches an edible product having extended release of an additive, comprising an additive/carrier blend where the additive/carrier blend comprises a blend of a carrier and a solution comprising the additive, the carrier comprising microcrystalline cellulose (MCC) and the additive comprising a flavor. Thus, Huzinec et al. discloses that additives such as flavors may be mixed with carrier materials such as microcrystalline cellulose to form an additive/carrier blend that is added to edible products for extended release of the additive. Huzinec et al. does not disclose or suggest that microcrystalline cellulose may be added as a filler to

microcapsules, let alone to matrix particles, to strengthen the matrix wall to prevent seepage of the oil contents on the surface of the particle as surface oil.

Thus, none of the cited references, alone or in combination, disclose or suggest matrix particles as claimed by Appellants comprising a discontinuous phase of a plurality of inclusions of oil, the oil dispersed within a matrix, the matrix comprising a crosslinked polymer and at least one filler, or that a filler such as MCC can or should be added to the wall of such matrix particles to prevent surface oil. Huzinec et al. utilizes cellulose as a delivery system (see col. 2, lines 8-19) rather than as a filler to strengthen the walls of matrix particles to prevent seepage of oil to the surface of the particles. Thus, Cherukuri et al., alone or in combination with Huzinec et al., does not disclose or suggest all the limitations of independent claim 1 of the present application. A person skilled in the art would not be able to predict on the basis of the disclosure in Cherukuri et al. and Huzinec et al. that the problem of surface oil can be overcome by incorporating microcrystalline cellulose as a filler in the matrix particles.

Point ii

Cherukuri et al. does not disclose or suggest matrix particles as claimed by Appellants. Huzinec et al. does not cure the deficiencies of Cherukuri et al.

In any case, the resulting combination of the references would not suggest Appellants' claims. Even if Cherukuri et al. were combined with Huzinec et al., the resulting combination would not suggest Appellants' claims 1 and 6. As stated above, Huzinec et al. teaches mixing a carrier such as microcrystalline cellulose with an additive flavor. That is, Huzinec et al. teaches adding microcrystalline cellulose carrier to a discontinuous phase, namely, the flavor oil rather than to the continuous phase, namely, the matrix particle comprising a crosslinked polymer. Thus, even if they could be combined, the combination of Cherukuri et al. and Huzinec et al. would not result in matrix particles comprising a discontinuous phase of a plurality of inclusions of oil, the matrix comprising a crosslinked polymer and at least one filler, as claimed by Appellants.

Therefore, the proposed combination of Cherukuri et al. and Huzinec et al. fails to suggest Appellants' claims 1 and 6.

Point iii

The rejection of claim 6 as obvious over Cherukuri et al. in view of Huzinec et al. is improper because:

1. the references do not account for every element of the claims, as set forth above:
and
2. deriving the claimed subject matter requires picking and choosing disparate elements from the prior art and simply lumping them together to attempt to recreate the present claims using Appellants' disclosure as a guide.

One would not derive the claimed subject matter prospectively absent reliance on Appellants' disclosure. The prior art must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983); MPEP 2142.02(IV). Furthermore, even when improperly relying on Appellants' disclosure to combine the references, the combination fails to recreate the claimed subject matter by not accounting for a matrix particle comprising a discontinuous phase of a plurality of inclusions of oil, the oil dispersed within a matrix, the matrix comprising a cross linked polymer and at least one filler. Thus, the rejection is improper and should be withdrawn.

E. Rejection under 35 U.S.C. §103(a) of Claim 9

Point i

Claim 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Cherukuri et al. in view of Merritt et al. The Answer maintains that there is motivation to combine Cherukuri et al. and Merritt et al. and add coloring matter to the encapsulated flavor particle.

The deficiencies of Cherukuri et al. have been discussed in detail above. Merritt et al., alone or in combination with Cherukuri et al., do not remedy the deficiencies of Cherukuri et al. The combination would still lack the teaching or suggestion of matrix particles comprising a discontinuous phase of a plurality of inclusions of oil, the oil dispersed within a matrix, the matrix comprising a crosslinked polymer and at least one filler. As Cherukuri et al. and Merritt et al., alone or in combination do not teach or suggest these features of the present claims, even if these two references are combined as alleged in the Answer, one of ordinary skill in the art would not be able to arrive at the subject matter as recited and claimed in claim 1. Therefore, the rejection over Cherukuri et al. in view of Merritt et al. should also be withdrawn.

Points ii and iii

In reply to Appellants' argument that Merritt et al. fails to teach or suggest matrix particles and that Merritt et al. (col. 11, lines 25-32) expressly teach against the claimed subject matter of claim 9 (Appeal brief, page 26, lines 3-8 and 8-11), the Answer states that one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references. This is a circular argument because one would not have considered combining the references absent the teachings of Appellants' own Specification. Appellants respectfully submit that the Office has failed to consider the teachings of Cherukuri et al. and Merritt et al. as a whole, including disclosures within the references that teach away from the suggested combination as explained in the Appeal Brief.

Appellants submit that the references, even in combination, do not contain sufficient teachings or suggestions to motivate one of ordinary skill in the art to modify and apply such teachings in arriving at the present claims absent a prior knowledge of Applicant's disclosure, and as such, any rejection based on Cherukuri et al. would result from impermissible hindsight. Appellants submit that the Office uses hindsight reconstruction to support the position that the combination of Cherukuri et al. and Huzinec et al., or Cherukuri et al. and Merritt et al., teaches the matrix particles recited in

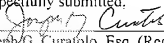
Appellants' claims 1, 6 and 9. If this were permissible, all that would be needed to support an obviousness rejection based on a combination of references would be to use hindsight reconstruction, and allege that the combination possesses the same properties as the subject matter claimed by an applicant. This would nullify the principal of unexpected results which is specifically held by the Supreme Court to be valid evidence and a secondary consideration to be considered in rebutting an obviousness rejection. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) *upholding Graham v. John Deere*, 393 U.S. 1, 17-18 (1966).

Accordingly, Appellants respectfully submit that the Office has failed to present a *prima facie* case of obviousness and requests that the Board reverse the Office's rejection of claim 9 over Cherukuri et al. in view of Merritt et al. under 35 U.S.C. §103(a).

Conclusion

Appellants submit that the remarks presented in Appellants' Brief under 37 C.F.R. §41.37, as well as the remarks of Appellants' Reply Brief under 37 C.F.R. §41.41 presented hereinabove, address and rebut all existing allegations concerning the 35 U.S.C. §§102 and 103 rejections of all pending claims. Appellants respectfully request that the Board reverse the §§102 and 103 rejections of claims 1-20. Appellants further request that that the Board reverse the Final Office Action in this case and require the Office to indicate the allowability of claims 1-20 over the art of record.

Respectfully submitted,



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